



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,794	04/10/2001	Nicolas Regent	FR 000036	1894

24737 7590 05/09/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2684

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/829,794

Applicant(s)

REGENT, NICOLAS

Examiner

Raymond S Dean

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed December 24, 2004 have been fully considered but they are not persuasive.

2. Examiner respectfully disagrees with Applicant's assertion on Page 5 4<sup>th</sup> Paragraph of the Remarks "The Applicant, respectfully points out that there is no clock associated ...". There is a clock associated to an auxiliary power source to produce a current time (See Oda Column 2 lines 37 – 40).

Examiner respectfully disagrees with Applicant's assertion on Page 5 5<sup>th</sup> Paragraph of the Remarks "There is no start time that is periodically updating after ...". The call processor of Callicotte calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time. Since the call processor will always know the start times there will be a periodic updating of the start time. (See Column 4 lines 8 – 24, Column 5 lines 15 – 25).

3. Regarding meeting the requirements of a "prima facie case of obviousness"

Oda and Callicotte both teach a mobile phone with a battery that provides power to the mobile. There is a suggestion and motivation in the Callicotte reference to combine the reference teachings such that the mobile phone can reduce it's on time to a minimum and to power down as much of itself as possible during sleep periods thus extending the life of said battery as taught by Callicotte.

As set forth above Callicotte teaches a periodic update of the start time. There is indication in Callicotte (See Background lines 33 – 39) that would give a person skilled in the art an indication that it would be possible to use the programmable time period provided by the call processor of Callicotte with a reasonable expectation of success. The combination of the mobile phone of Oda and the call processor of Callicotte, which provides programmable and updated time periods, produces a mobile phone with slotted paging mode that enables said mobile phone to reduce it's on time to a minimum and to power down as much of itself as possible during sleep periods thus extending the life of mobile phone battery. Since Oda and Callicotte both teach mobile phones with central processors one of ordinary skill in the art would be able to modify the processor circuitry of Oda with the call processor circuitry of Callicotte with a reasonable expectation of success.

The modification of the processor circuitry of Oda with the call processor circuitry of Callicotte will render a means for starting the device at a programmable start time that includes a clock associated to an auxiliary power source to produce a current time and a means for automatically and periodically updating the start time after said current time. The Oda reference teaches a means for starting the device at a particular point in

Art Unit: 2684

time. The modification of Oda via Callicotte provides a means for starting the device at a particular point in time with a programmable start time capability thereby creating a mobile phone with slotted paging capability which will extend the life of the mobile phone battery.

4. Regarding Claim 6, the term "start time" can be broadly interpreted therefore the specific definition of "start time" within the specification does not apply.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 3 and 5 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (5,551,077) in view of Callicotte et al. (5,910,944).

Regarding Claim 1, Oda teaches a communication device equipped with an automatic operation-keeping system, comprising: a main power source (Figure 1, Column 3 lines 12 – 14), a processing unit supplied with power by the main power source (Figure 1, power source (150)) and means for starting the device, characterized in that the means for starting the device further includes a clock associated to an auxiliary power source to produce a current time (Figure 1, Column 2 lines 37 – 48, the

Art Unit: 2684

clock will keep track of the current time so that there can be a record of when the main power source failed and when said main power source was restored).

Oda does not teach a means for starting the device at a programmable start time, characterized in that the means for starting the device further includes: a means for automatically and periodically updating the start time after said current time, the electric power supply for the updating means being ensured solely by the main power source.

Callicotte teaches a means for starting the device at a programmable start time (Column 4 lines 8 – 18, the mobile phone can be programmed to wake up and monitor the paging channel), characterized in that the means for starting the device further includes: a means for automatically and periodically updating the start time after said current time (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time), the electric power supply for the updating means being ensured solely by the main power source (Figure 1, the battery (150) provides the power to all of the circuits that the mobile phone (104) comprises).

Oda and Callicotte both teach a mobile phone with a battery thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the call processor taught above by Callicotte in the mobile phone of Oda for the purpose

Art Unit: 2684

of creating a slotted paging mode in said mobile phone thereby enabling said mobile phone to reduce it's on time to a minimum and to power down as much of itself as possible during sleep periods thus extending the life of said battery as taught by Callicotte.

Regarding Claim 2, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 1. Callicotte further teaches the automatic updating means for updating the start time (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time).

Regarding Claim 3, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 1. Callicotte further teaches a register for storing start times (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time, the call processor controls when the mobile phone wakes up to monitor the paging channel according to the instructions, which include the start times for waking up, sent by the base station, said start times must be stored in memory such that the call processor can

Art Unit: 2684

determine the restart times of the germane circuits), updated by automatic updating means to a time  $D$ , so that  $D = t + N$ , where  $N$  is a time value higher than or equal to a start interval and where  $t$  is the current time (Column 4 lines 8 – 24, the mobile phone will wake up and monitor the paging channel in intervals which means that said mobile phone will wake up and monitor the paging channel at a later time which is the current time + an increment in time).

Regarding Claim 5, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 1. Oda further teaches the device is a portable telephone (Figure 1, Column 3 lines 8 – 10).

Regarding Claim 6, Oda teaches a method of keeping a communication device in operation after it has been stopped accidentally, in which when the communication device is stopped by accident, a new start is automatically made (Column 2 lines 18 – 22).

Oda does not teach when the communication device is in operation, an automatic programmable start time is regularly updated to come after a current time and a new start is automatically made the moment when the current time established by a permanent clock coincides with the previously updated start time.

Callicotte teaches when the communication device is in operation, an automatic programmable start time is regularly updated to come after a current time (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus



Art Unit: 2684

said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time) and a new start is automatically made the moment when the current time established by a permanent clock coincides with the previously updated start time (Column 4 lines 8 – 24, the mobile phone will wake up and monitor the paging channel in intervals which means that said mobile phone will wake up and monitor the paging channel at a later time which is when the current time becomes the start time).

Oda and Callicotte both teach a mobile phone with a battery thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the call processor taught above by Callicotte in the mobile phone of Oda for the purpose of creating a slotted paging mode in said mobile phone thereby enabling said mobile phone to reduce it's on time to a minimum and to power down as much of itself as possible during sleep periods thus extending the life of said battery as taught by Callicotte.

Regarding Claim 7, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 6. Callicotte further teaches in which the start time is updated by adding a time increment to the current time (Column 4 lines 8 – 24, the mobile phone will wake up and monitor the paging channel in intervals which means that said mobile phone will wake up and monitor the paging channel at a later time which is the current time + an increment in time).

Regarding Claim 8, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 7. Callicotte further teaches in which the start time is updated with a

shorter interval than a value of the time increment (Column 6 lines 1 – 14, if a coarse resolution is chosen there will be a smaller number of sleep clock signal periods counted which means that the time duration of the sleep mode will be reduced thus the interval between a sleep period and a wake up period will be shorter).

Regarding Claim 9, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 1. Callicotte further teaches the start time is measured from the current time as an instantaneous value in seconds (Column 4 lines 16 – 18, the mobile phone wakes up and monitors the paging channel for 160 milliseconds which means that the interval between the sleep period and the wake up period can be measured in seconds).

Regarding Claim 10, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 9. Callicotte further teaches wherein the number of seconds in the instantaneous value is measured as a number of pulses of the clock (Figure 1, Column 4 lines 10 – 13, Column 4 lines 33 – 40, Column 4 lines 60 – 64, the oscillator is a reference clock for both the timing controller and call processor, said oscillator generates clock pulses).

Regarding Claim 11, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 1. Oda further teaches a first part that is supplied with power by the main power source and a first part that can be supplied with power either by the main power or auxiliary power source if the main power fails (Figure 1, Column 2 lines 18 – 22), Callicotte further teaches a part of a processing unit (Figure 1, Column 4 lines 8 – 10, the call processor is supplied with power from the battery (150)).

Regarding Claim 12, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 11. Callicotte further teaches at least one register for retaining the current time and the start time (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time, said start times will be stored in memory such that the call processor will always know when to restart the required circuits, in order to determine if the start times have arrived the call processor must keep track of the current time so that there can be a comparison between said start times and said current time).

Regarding Claim 13, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 6. Callicotte further teaches the start time is measured from the current time as an instantaneous value measured in seconds (Column 4 lines 16 – 18, the mobile phone wakes up and monitors the paging channel for 160 milliseconds which means that the interval between the sleep period and the wake up period can be measured in seconds).

Regarding Claim 14, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 13. Callicotte further teaches wherein the number of seconds in the instantaneous value is measured as a number of pulses of the clock (Figure 1, Column 4 lines 10 – 13, Column 4 lines 33 – 40, Column 4 lines 60 – 64, the

oscillator is a reference clock for both the timing controller and call processor, said oscillator generates clock pulses).

Regarding Claim 15, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 6. Oda further teaches when the communication device is in operation a main power source supplies power to a first part of a processing section for the communication device and when the communication device is stopped by accident, the first part is not supplied power and the first part is supplied power from an auxiliary source (Figure 1, Column 2 lines 18 – 22), Callicotte further teaches a part of a processing unit (Figure 1, Column 4 lines 8 – 10, the call processor is supplied with power from the battery (150)).

Regarding Claim 16, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 15. Callicotte further teaches at least one register for retaining the current time and the start time (Column 4 lines 8 – 24, Column 5 lines 15 – 25, the call processor calculates the restart times for the required circuits that enable the mobile phone to wake up and monitor the paging channel, said mobile phone will wake up in intervals to monitor the paging channel thus said call processor will always know the start times for said waking up such that the required circuits germane to said waking up will always be restarted on time, said start times will be stored in memory such that the call processor will always know when to restart the required circuits, in order to determine if the start times have arrived the call processor must keep track of the current time so that there can be a comparison between said start times and said current time).

Regarding Claim 17, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 15. Oda further teaches a first clocking device operatively connected to the first part, wherein the said clocking device is powered by the auxiliary power source (Figure 1, Column 2 lines 37 – 40). Callicotte further teaches a clocking device operatively connected to a part of a processing unit (Figure 1, timing controller (114)).

Regarding Claim 18, Oda in view of Callicotte teaches all of the claimed limitations recited in Claim 17. Callicotte further teaches that the second clocking is a low frequency clocking device (Figures 1, 2, Column 5 lines 6 – 17, lines 44 – 49, the timing controller comprises the sleep time controller which enables the timing controller to provide the low frequency sleep clock signal to the call processor).

7. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (5,551,077) in view of Callicotte et al. (5,910,944) as applied to Claims 1, 15 above, and further in view of Metroka et al. (5,036,532).

Regarding Claims 4, 19, Oda in view of Callicotte teaches all of the claimed limitations recited in Claims 1, 15. Oda in view of Callicotte does not teach an auxiliary power source that comprises an electric capacitance.

Metroka teaches an auxiliary power source that comprises an electric capacitance (Column 3 lines 55 – 60).

Oda in view of Callicotte and Metroka teach a mobile phone with an auxiliary power source thus it would have been obvious to one of ordinary skill in the art at the

time the invention was made to use the capacitor taught by Metroka in the mobile phone of Oda in view of Callicotte for the purpose of enabling standby power when the main power source is interrupted as taught by Metroka.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (5,551,077) in view of Callicotte et al. (5,910,944) in further view of Metroka et al. (5,036,532) as applied to Claim 19 above, and further in view of Yeh (5,995,814).

Regarding Claim 20, Oda in view of Callicotte and in further view of Metroka teaches all of the claimed limitations 19. Oda in view of Callicotte and in further view of Metroka does not teach a sum of filter capacitors.

Yeh teaches a sum of filter capacitors (Column 4 lines 40 – 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the filter capacitors taught by Yeh in the mobile phone of Oda in view of Callicotte and in further view of Metroka for the purpose of reducing power supply noise as taught by as taught by Yeh.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2684

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

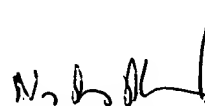
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 571-272-7877. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond S. Dean  
April 29, 2005



**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**